

REMARKSAmendments

In the descriptive part of the specification, various minor errors have been corrected. In the claims, claims 1, 15, and 22 have been amended to recite that the focusing shape serves to focus acoustic wave energy passing through the elements to an area proximate a center line of the array axis. Basis for this is found on page 5, lines 4-7, and page 8, line 21 to page 9, line 3. Claim 14 has been canceled. Claims 1, 15, and 22 have been amended solely to more clearly define and recite the present invention. The amendments and the cancellation of claim 14 are not in any way related to the Examiner's rejection based on prior art nor any applied or cited prior art and have been made in the interest of rapid prosecution and without prejudice to Applicant's right to prosecute claims of similar or different scope to the unamended and canceled claims in one or more continuation applications.

The Rejection Under 35 USC § 102(b)

Applicant respectfully traverses the rejection of claims 1-3, 12, 13, 15, 16, 18-20, and 22 under 35 USC § 102(b) as anticipated by Applicant Admitted Prior Art ("AAPA"), insofar as the rejection is applicable to the amended claims.

The present claims are directed to a touchscreen having an array of focusing-shaped, acoustically reflective elements positioned to transmit or receive acoustic signals into or out of a touch-sensitive area. A key feature of these claims is that the reflective array elements transmit acoustic energy to form a wave guide. As set forth on page 1, line 20 to page 2, line 5, "an "acoustically reflective" element includes any element which at least partially reflects acoustic wave energy, even if such element may actually pass through nearly all of the wave energy. For example, depending on the size of the touch-sensitive area, the number of elements used in the reflective array, energy of the acoustic signal and/or other factors, it may be possible that an individual reflective array element reflects as little as 1% or less of an acoustic wave into the touch-sensitive area, while passing through the remaining wave energy to the next successive array element". Thus it is the acoustic energy that passes through the element, i.e. is transmitted, that is focused, not energy that is reflected. It is essential for surface acoustic (SAW) touchscreen array designs that an individual reflective element transmit a majority of the incident wave energy and reflect only a minority of the incident wave energy. The function achieved by the present claims is the focusing-shaped reflective array elements have a converging focusing effect on the transmitted beam, not the reflected beam. This is in contrast to the prior art cited by the examiner in which it is the reflected

beam that is focused (often with no transmitted beam at all). The reflector designs in the figures of the present application are designed to convergently focus the transmitted beam, but in fact are not designed to focus the reflective beam (and hence have center lines that are straight rather than convexly curved).

In contrast to the present claims in which the acoustically reflective elements of interest are used to transmit acoustic energy and are weak partial reflectors, the AAPA identified by the Examiner refers to the use of reflective elements that focus the *reflected* energy, not the transmitted energy (i.e. the energy that passes through the reflective elements). This is distinctly different from the present claims. The teaching of focusing reflected energy does not make the focusing of transmitted energy inherent.

The Rejection Under 35 USC § 103(a)

Applicant respectfully traverses the rejection of claims 4-6, 9, 11, 21, and 23-25 under 35 USC § 103(a) as unpatentable over AAPA in view of Schroeder (U.S. Patent No. 3,483,563), insofar as the rejection is applicable to the amended claims.

The deficiencies of the AAPA, i.e. the use of focusing of the reflected acoustic energy rather than the transmitted acoustic energy as recited in the present claims, are not resolved by the addition of Schroeder. Schroeder discloses the use of a reflector element that focuses the reflected energy. Any transmittance has lost efficiency so it would not be obvious to one seeking to focus transmitted energy to look to Schroeder.

Applicant respectfully traverses the rejection of claims 7-8 under 35 USC § 103(a) as unpatentable over AAPA in view of Blanchard (U.S. Patent No. 6,692,137), insofar as the rejection is applicable to the amended claims.

The deficiencies of the AAPA are not resolved by the addition of Blanchard. Blanchard uses a mirror that focuses, but does not reflect. Therefore, it would not be obvious to look to Blanchard if one were seeking to focus transmitted energy.

Applicant respectfully traverses the rejection of claim 10 under 35 USC § 103(a) as unpatentable over AAPA in view of Schroeder (U.S. Patent No. 3,483,563), and further in view of Laming et al. (U.S. Patent No. 6,549,705), insofar as the rejection is applicable to the amended claims.

The deficiencies of the AAPA and Schroeder are not resolved by the addition of Laming et al. Laming discloses both transmission and focusing by the use of two different angles. However, the transmitted beam is absorbed, unlike the presently claimed invention in which the transmitted beam is focused. Therefore, it would not be obvious to combine the AAPA with Schroeder and Laming if one were seeking to focus transmitted energy.

Applicant respectfully traverses the rejection of claim 14 under 35 USC § 103(a) as unpatentable over AAPA in view of Hiyama et al. (U.S. Patent No. 7,006,173). Applicant believes that this rejection has been rendered moot in view of the cancellation of claim 14.

Applicant respectfully traverses the rejection of claim 17 under 35 USC § 103(a) as unpatentable over AAPA in view of Waltermann (U.S. Patent No. 7,049,960), insofar as the rejection is applicable to the amended claims.

The deficiencies of the AAPA are not resolved by the addition of Waltermann. Waltermann discloses a method of tracking objects in a defined area. This is distinctly different from the present claims that recite touchscreen having an array of focusing-shaped, acoustically reflective elements positioned to transmit or receive acoustic signals into or out of a touch-sensitive area. It would not be obvious to one seeking to focus transmitted energy for a touchscreen to look to AAPA and Waltermann.

Disclosure Under 37 CFR § 1.56

In fulfilling the duty of candor and good faith, the following documents are hereby disclosed to the Patent Office in accordance with 37 CFR § 1.56. It is not admitted that the information in the listed documents is material to patentability as defined in 37 CFR § 1.56(b). The Examiner is requested to consider the documents in the examination of this application.

Accompanying this statement are Forms PTO/SB/08A and PTO/SB/08B in duplicate on which the documents are listed. The Examiner is requested to return an initialed and signed copy of the form once the documents have been considered.

The following documents were cited by the European Patent Office in the European Search Report for European Application No. EP 05 10 0046 which is a counterpart for this application. The documents were cited in category "A" as "technological background". A copy of the Search Report is attached.

U.S. PATENT DOCUMENTS

Document Number	Publication Date	Name of Patentee or Applicant	Category
US-4825212-A	04-25-1989	Adler et al.	A
US-6636201-B1*	10-21-2003	Gomes et al.	A

*Previously cited in Information Disclosure Statement mailed January 6, 2004 and so is not listed on the Form PTO/SB/08A

The following documents, not previously cited, are referred to in the specification.

U.S. PATENT DOCUMENTS

Document Number	Publication Date	Name of Patentee or Applicant
US-4880665-A	11-14-1989	Adler et al.
US-5648643-A	07-15-1997	Knowles et al.
US-5883457-A	03-16-1999	Rinde et al.

The following additional patent is also being cited.

U.S. PATENT DOCUMENTS

Document Number	Publication Date	Name of Patentee or Applicant
US-6091406-A	07-18-2000	Kambara et al.

Copies of Documents

In accordance with 37 CFR §1.98(a)(2), copies of the U.S. patents listed above are not being submitted, although copies will be sent on request.

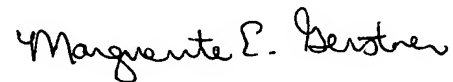
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In accordance with 37 CFR § 1.97(c)(2), the Commissioner is authorized to charge the fee for submitting this Information Disclosure Statement (\$180) to Deposit Account No. 18-0560.

Conclusion

It is believed that this application is now in condition for allowance and such action at an early date is earnestly requested. If, however, there are any outstanding issues which can be usefully discussed by telephone, the Examiner is asked to call the undersigned.

Respectfully submitted,

A handwritten signature in cursive script, reading "Marguerite E. Gerstner".

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